

## TITLE: Reinforced Structure of a Folded Umbrella

### BACKGROUND OF THE INVENTION

A conventional collapsed umbrella, as shown in Figure 1 and 2, includes a first rib (1), and a second rib (2), both of which are connected by a joint (3). When strong wind blows, the second rib (2) would be lifted up (imaged line in Figure 1) or moved sideward (imaged lines in Figure 2). At this time, the connecting point of the second (2) and the joint (3) will be easily broken, since it is the most position being forced during the second rib (2) is bent. The collapsed umbrella can't be used therefore as the rib is broken.

Accordingly, the present invention is to provide a reinforced structure of a collapsed umbrella, which provides a new structure to protect the rib from being broken by the wind that overcomes the drawback of the prior art. Now, accompanying with the following drawings, the character of the present invention will be described here and after.

### BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a front plan view showing a conventional collapsed umbrella.

Figure 2 is a top plan view showing the conventional collapsed umbrella of Figure 1.

Figure 3 is a front plan view showing a collapsed umbrella with a reinforced structure according to the present invention.

Figure 4 is a cross-sectional plan view of parts of Figure 3.

Figure 5 is a perspective view of Figure 4.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Please referring to Figure 3 to 5, the present invention relates to a reinforced structure of a collapsed umbrella, which includes a first rib (1) and a second rib (2) being connected with a joint (3). The character of the present invention is the joint (3) being provided with an extended end (31) to receive the inner end of the second rib (2). A reinforced rib (4) is provided to connect its inner end with middle portion of the first rib (1), while the outer end of the reinforced rib (4) is extended into the joint (3) and connected with the outer end of the first rib (1).

When the strong wind brows the opened umbrella, the extended end (31) of the joint (3) provides a better strength to resist the against wind as the second rib (2) is lifted, as shown in Figure 3. And the outer end of the reinforced rib (4) is received in the joint (3) that increases the strength of the whole structure to prevent the joint (3) or the second rib (2) from being twisted and broken. It can be found that the reinforced structure of the collapsed umbrella according to the present invention does obtain the excellent effect for resisting against wind.